Capital Square, 400 Locust Street, Des Moines, Iowa 50309-2340 since prior to the filing date of this application. This deposit of the Inbred Maize Line PH54H will be maintained in the ATCC depository, which is a public depository, for a period of 30 years, or 5 years after the most recent request, or for the effective life of the patent, whichever is longer, and will be replaced if it becomes nonviable during that period. Additionally, Applicant has satisfied all the requirements of 37 C.F.R. §§1.801 - 1.809, including providing an indication of the viability of the sample. Applicant imposes no restrictions on the availability of the deposited material from the ATCC; however, Applicant has no authority to waive any restrictions imposed by law on the transfer of biological material or its transportation in commerce. Applicant does not waive any infringement of his rights granted under this patent or under the Plant Variety Protection Act (7 USC 2321 et seq.). U.S. Plant Variety Protection of Inbred Maize Line PH54H has been applied for under Application No. 200000204.

## IN THE CLAIMS

Claims 1, 5, 6, 21, 24, 25, 37, 40, 41, 42, 45, and 50 have been amended as follows:

- 1. (Amended) Seed of maize inbred line designated PH54H, representative seed of said line having been deposited under ATCC Accession No. PTA-4259.
- 5. (Twice Amended) The tissue culture of claim 4, cells or protoplasts of the tissue culture being from a tissue source selected from the group consisting of leaves, pollen, embryos, roots, root tips, anthers, silks, flowers, kernels, ears, cobs, husks, and stalks.
- 6. (Twice Amended) A maize plant regenerated from the tissue culture of claim 4, capable of expressing all the morphological and physiological characteristics of inbred line PH54H, representative seed of which have been deposited under ATCC Accession No. PTA-4259.
- 21. (Amended) A maize plant, or parts thereof, having all the physiological and morphological characteristics of inbred line PH54H, representative seed of said line having been deposited under ATCC accession No. PTA-4259.



- 24. (Twice Amended) The tissue culture of claim 23, cells or protoplasts of the tissue culture being from a tissue source selected from the group consisting of leaves, pollen, embryos, roots, root tips, anthers, silks, flowers, kernels, ears, cobs, husks, and stalks.
- 25. (Amended) A maize plant regenerated from the tissue culture of claim 23, capable of expressing all the morphological and physiological characteristics of inbred line PH54H, representative seed of which have been deposited under ATCC Accession No. PTA-4259.
- 37. (Amended) A process for producing inbred PH54H, representative seed of which have been deposited under ATCC Accession No. PTA-4259, comprising:
  - (a) planting a collection of seed comprising seed of a hybrid, one of whose parents is inbred PH54H said collection also comprising seed of said inbred;
  - (b) growing plants from said collection of seed;
  - (c) identifying said inbred PH54H plants;
  - (d) selecting said inbred PH54H plant; and
  - (e) controlling pollination in a manner which preserves the homozygosity of said inbred PH54H plant.

40. (Amended) A method for producing a PH54H-derived maize plant, comprising:

crossing inbred maize line PH54H, representative seed of said line having been deposited under ATCC Accession No. PTA-4259, with second maize plant to yield progeny maize seed;

(b) growing said progeny maize seed, under plant growth conditions, to yield said PH54H-derived maize plant.

41 (Twice Amended) A PH54H-derived maize plant, or parts thereof, produced by the method of claim 40.

42. (Amended) The method of claim 40, further comprising:

(c) crossing said PH54H-derived maize plant with itself or another maize plant to yield additional PH54H-derived progeny maize seed;

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80h)

Birth

- (d) growing said progeny maize seed of step (c) under plant growth conditions, to yield additional PH54H-derived maize plants;
- (e) repeating the crossing and growing steps of (c) and (d) from 1 to 4 times to generate further PH54H-derived maize plants.
- 45. (Twice Amended) A PH54H-derived maize plant, or parts thereof, produced by the method of claim 44.
- 50. (Amended) The seed of claim 1 wherein said seed further comprises genetic or cytoplasmic male sterility factors.